



Smoke Optical Fires Sampled During SEAC⁴RS

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In Situ Sampling of the Smoke from the Yosemite Rim Fire

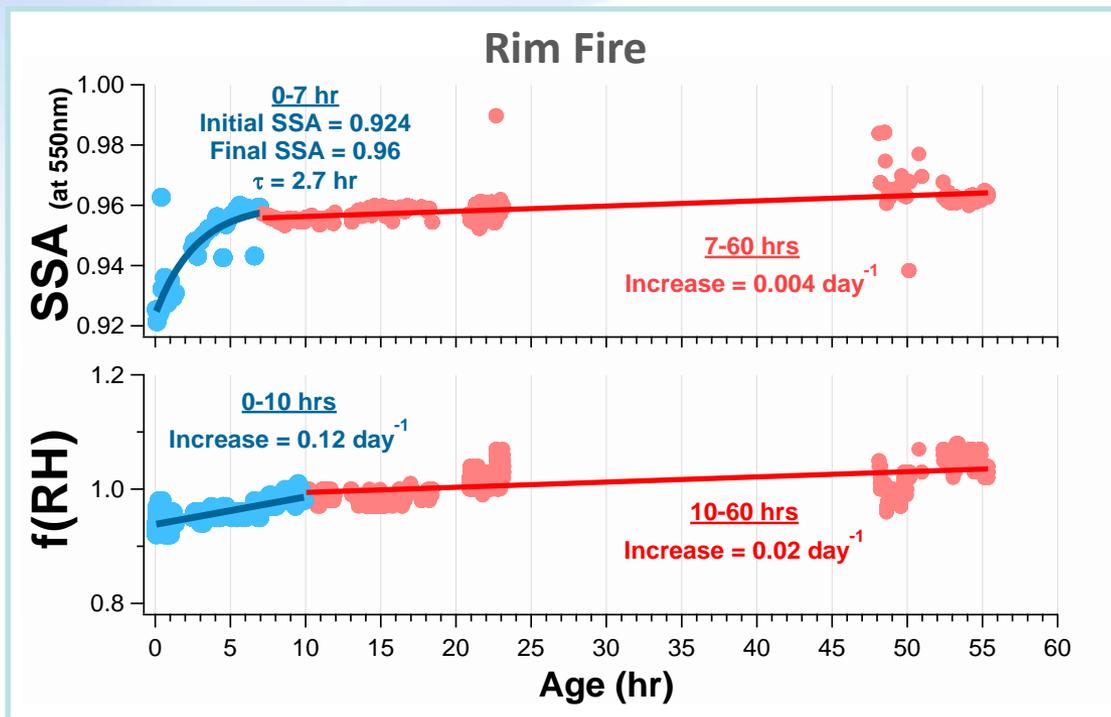
- Sampled smoke as it aged for up to two days

Increase in the aerosol Single Scattering Albedo (SSA)

- 0-7 hr: Secondary aerosol formation results in SSA increases (whiter smoke)
- 7-60 hr: slower increase due to continued processing

Smoke remains hydrophobic even after 2 days of aging

- $f(\text{RH})$ is a measure of aerosol water-uptake potential
- Remains near 1 meaning the smoke does not uptake water



... But not all smoke is the same

- Smoke from agricultural fires was more likely to uptake water due to higher sulfur content

Drastic differences in smoke radiative properties and lifetimes due to fire source.